CLAIMS

1. A decoupling element of deformable material for interposing between the faces (31, 41; 312, 413) of two supports (3, 4; 3', 4'; 300, 400) of a drive device having a central axis (X'X) of rotation, the element being formed by a ring (2, 200) comprising a central core (1) and at least two opposite faces (21e, 21i; 212, 213), and being characterized in that at least one of these faces (21i, 21e; 212, 213) and the facing face (31, 41; 312, 313) of the support (3, 4; 3', 4'; 300, 400) present complementary abrupt projections suitable for meshing together, meshing of the ring (2, 200) creating zones (K_1) at the roots of the projections (2e, 2i; 2'e, 2'i; 3e, 4i; 3'e, 4'i; 20e, 20i; 202, 203; 302, 403) where the central core (1) substantially works in shear, these zones being regularly distributed over at least one of the faces (21e, 21i; 212, 213) of the ring (2, 200).

2. A decoupling element according to claim 1, in which the two opposite faces of the ring (2, 200) and the facing faces of the supports (3, 4; 3', 4'; 300, 400) are fluted.

3. A decoupling element according to claim 1, in which a single face of the ring (2, 200) and the facing face of the support (3, 4; 3', 4'; 300, 400) are fluted, the non-fluted face of the ring and the facing face of the support being bonded together.

4. A decoupling embodiment according to claim 3, in which the non-fluted face of the ring and the facing face of the support are bonded together via a link insert.

5. A decoupling element according to claim 1, in which the faces (21e, 21i) of the ring (2) and of the supports (3, 3'; 4, 4') which mesh are cylindrical and parallel to the axis of rotation (X'X), the projections (2e, 2i; 2'e, 2'i; 3e, 4i; 3'e, 4'i; 20e, 20i) being radial.

6. A decoupling element according to claim 1, in which the square of the ratio of the radii (R1, R2) of the cylindrical faces is inversely equal to the ratio of the angles (α_1, α_2) at the center intercepting two projections (2e, 2i; 2'e, 2'i; 20e, 20i) of the respective faces, the opposite projections being periodically distributed on the basis of a pattern.

7. A decoupling element according to claim 1, in which the faces (212, 213) of the ring (200) and the faces (312, 413) of the supports (300, 400) which mesh therewith are radial and perpendicular to the axis (X'X), the projections (202, 203; 302, 403) being axial.

8. A decoupling element according to claim 1, in which the faces of the ring (240) and of the supports (340, 440) which mesh are cylindrical faces (25i, 25e) extending parallel to said axis of rotation (X'X), and radial faces (272, 273) extending perpendicularly to said axis, the projections being respectively radial (24i, 24e; 342, 443) and axial (262, 263).

9. A decoupling element according to claim 1, in which the projections are crenellations of right section (2e, 2i) having side flanks (22a) that are substantially perpendicular to the face (21e, 21i) of the ring (2) on which they are formed.

10. A decoupling element according to 6, in which the projections (20e, 20i) present side flanks (22b) of section that flares from the face (21e, 21i) of the ring, with a mean angle (α_3) of up to 60° relative to the radius (R1, R2), the projections being of trapezoidal or hyperbolic shape or of appropriate curvature.

11. A decoupling element according to claim 9 or claim 10, in which the projections (2'e, 2'i) present a profile that is constant or that varies linearly so as to facilitate unmolding and assembly by self-centering when engaging the ring (2) with the supports (3, 4).

12. A decoupling element according to claim 1, in which the ring (2) is split to form an opening (5) so as to make it easier to assemble by being splayed apart while the hub (3) is being inserted and by being compressed while it is being inserted into the rim (4), thereby enabling play between the parts to be compensated.

13. A decoupling element according to claim 1, in which the ring (2, 200) is made by complete cutting, by molding, by extrusion followed by slicing, or by injection/compression, the material possibly being flat and then rolled up and then cut to make split rings.